# Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of	)
National Science and Technology Network, Inc.	)
Licensee of Stations WPMM274 and WPMP967	

### MEMORANDUM OPINION AND ORDER

Adopted: August 30, 2016 Released: September 1, 2016

By the Commission:

#### I. INTRODUCTION

1. We have before us an application for review<sup>1</sup> filed by National Science and Technology Network, Inc. (NSTN) of an *Order on Further Reconsideration and Order of Modification (Modification Order)*<sup>2</sup> by the Wireless Telecommunications Bureau's Mobility Division (Division) that modified NSTN's licenses for private land mobile radio (PLMR) Stations WPMM274 and WPMP967 to delete specified locations and frequencies. For the reasons set forth below, we deny NSTN's application for review.

## II. BACKGROUND

- 2. NSTN's above-captioned PLMR stations operate on 12.5 kHz offset frequencies in the 470-512 MHz band (T-Band) at, *inter alia*, San Rafael Hills, Sunset Ridge, Oat Mountain, Monte Nido, and Castro Peak, California. Mobile Relay Associates (MRA) asked the Commission to modify NSTN's licenses for Stations WPMM274 and WPMP967 by deleting certain frequencies that MRA asserted were in conflict with MRA's authorizations.<sup>3</sup> Specifically, MRA requested modification of the licenses on the grounds that certain frequency pairs were not properly coordinated because, *inter alia*, they did not satisfy the interference protection criteria of TIA/EIA/TSB-88 (TSB-88), and should not have been certified by the frequency coordinator. In addition, MRA asserted that NSTN's improper operations were causing interference to MRA's pre-existing stations.
- 3. On February 6, 2012, the Division directed MRA to supplement the record by identifying which NSTN facilities cause interference to which MRA stations, and to describe and document the interference.<sup>4</sup> In response, MRA argued that a showing of actual interference was not necessary for

<sup>&</sup>lt;sup>1</sup> Application for Review of FCC Order on Further Reconsideration and Order of Modification, DA 13-541, Filed by National Science and Technology Network, Inc. (NSTN) (filed Apr. 23, 2013) (AFR). Mobile Relay Associates filed an Opposition to Application for Review on May 6, 2013 (Opposition).

<sup>&</sup>lt;sup>2</sup> Mobile Relay Associates and National Science and Technology Network, Inc., *Order on Further Reconsideration and Order of Modification*, 28 FCC Red 3222 (WTB MD 2013) (*Modification Order*).

<sup>&</sup>lt;sup>3</sup> See Request to Initiate Modification Proceedings (filed Aug. 21, 2003; supplemented Sept. 29, 2003, Oct. 28, 2003, May 26, 2004, June 2, 2004, Oct. 24, 2006, and Apr. 12, 2012).

<sup>&</sup>lt;sup>4</sup> See Letter dated Feb. 6, 2012 from Scot Stone, Deputy Chief, Mobility Division, Wireless Telecommunications Bureau to David J. Kaufman, at 1.

MRA's modification request to be granted because the continued authorization of the NSTN licenses also harmed MRA by blocking MRA from filing applications to expand its operations.<sup>5</sup> MRA's principal also stated, with respect to actual interference, that

MRA has been suffering occasional interference on each of its facilities listed in Exhibit 1 [setting forth the NSTN frequencies that did not satisfy the TSB-88 analysis with respect to the preexisting MRA stations] for about eight years now . . . . While this interference is not constant, when it occurs, it can be significant, and can cause material harm to the communications of MRA subscribers. Customers have complained to MRA of having been unable to transmit, unable to receive, and unable to reach certain units. . . . [¶] While I have been unable to prove that NSTN's units are the source of the interference when it occurs, I have eliminated practically every other possibility, and I fully believe that NSTN or its subscribers' units are the source. I have monitored the channels, I have driven the involved areas myself, and I have never found any other source of harmful interference.<sup>6</sup>

- 4. On February 22, 2012, President Obama signed into law the Middle Class Tax Relief and Job Creation Act of 2012 (Spectrum Act), which, among other things, required the Commission to conduct an incentive auction to recover a portion of the television broadcast spectrum. Part of that spectrum (UHF television channels 14-20) includes frequencies on which NSTN's above-captioned PLMR stations, as well as the MRA stations discussed herein, operate. In addition, Section 6103 of the legislation provides that, not later than nine years after the date of enactment, the Commission shall "reallocate the spectrum in the 470-512 MHz band (referred to in this section as the "T-Band spectrum") currently used by public safety eligibles as identified in section 90.303 of title 47, Code of Federal Regulations" and "begin a system of competitive bidding under section 309(j) of the Communications Act of 1934 (47 U.S.C. 309(j)) to grant new initial licenses for the use of the spectrum," and that "relocation of public safety entities from the T-Band spectrum" shall be completed not later than two years after completion of the system of competitive bidding.
- 5. On April 26, 2012, the Wireless Telecommunications Bureau and the Public Safety and Homeland Security Bureau (the Bureaus) suspended the acceptance and processing of Part 22 and 90 applications for new or expanded use of the T-Band. The Bureaus concluded that a freeze of T-Band licensing while the Commission considered issues surrounding future use of the T-Band, solicited input from interested parties, and worked to implement the directives of the Spectrum Act would avoid altering the landscape and thereby make implementing the Act more difficult or costly. The Bureaus also waived the January 1, 2013 deadline for PLMR licensees in the 470-512 MHz band to migrate to narrowband (12.5 kHz or narrower) technology.

<sup>&</sup>lt;sup>5</sup> See 2012 Supplement to Request to Initiate Modification Proceedings at 4-6 (filed Apr. 12, 2012).

<sup>&</sup>lt;sup>6</sup> *Id.* at Declaration of Mark J. Abrams.

<sup>&</sup>lt;sup>7</sup> Pub. L. No. 112-96, 126 Stat. 156 (2012).

<sup>&</sup>lt;sup>8</sup> *Id.*, § 6403.

<sup>&</sup>lt;sup>9</sup> *Id.*, § 6103(a).

<sup>&</sup>lt;sup>10</sup> *Id.*, § 6103(b), (c).

<sup>&</sup>lt;sup>11</sup> See Wireless Telecommunications Bureau and Public Safety and Homeland Security Bureau Suspend the Acceptance and Processing of Certain Part 22 and 90 Applications for 470-512 MHz (T-Band) Spectrum, *Public Notice*, 27 FCC Rcd 4218 (WTB/PSHSB 2012).

<sup>&</sup>lt;sup>12</sup> Id. at 4218

<sup>&</sup>lt;sup>13</sup> See Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, *Order*, WT Docket No. 99-87, 27 FCC Rcd 4213, 4215 ¶ 7 (*T-Band Narrowbanding Waiver*), on recon., 27 FCC Rcd 14770 (WTB/PSHSB/OET 2012).

- 6. On the same date that the freeze was imposed, the Division denied MRA's modification request. The Division concluded that, in light of the T-Band licensing suspension and possible future relocation of T-Band licensees under consideration by the Commission, the public interest would not be served by initiating modification proceedings with respect to NSTN's stations at that time. It noted that, due to the licensing freeze, MRA could not expand its operations, and the requested modification of NSTN's licenses would not make any new spectrum available to MRA or any other entity. MRA sought reconsideration of this decision, reiterating that it believed that it was experiencing harmful interference from NSTN's operations and arguing that the Division erred in denying the modification request on the basis of the T-Band licensing suspension. In the same case of the T-Band licensing suspension.
- 7. On October 2, 2012, the Commission released a *Notice of Proposed Rulemaking* seeking comment on proposals to implement the Spectrum Act mandate to conduct an incentive auction of broadcast television spectrum, but made no proposals regarding the reallocation and auction of T-Band spectrum.<sup>17</sup> The Commission stated that a subsequent *Public Notice* would advance the record on issues related to the Spectrum Act's technical, financial, administrative, legal, and policy implications for T-Band licensees.<sup>18</sup>
- 8. On October 10, 2012, the Division granted MRA's petition for reconsideration and proposed to modify NSTN's above-captioned licenses, pursuant to Section 316 of the Communications Act, as amended. The Division concluded that, in light of the indefinite timetable for Commission action regarding the T-Band, the public interest would be served by addressing MRA's request. Division staff studied the interactions of the NSTN stations with preexisting MRA stations and concluded that, at specified locations and frequencies, the NSTN frequencies did not satisfy the TSB-88 analysis. The Division determined that the coordination process and subsequent grant of the NSTN applications based on an erroneous coordination certification were defective and that modification of the NSTN licenses was appropriate. It therefore proposed to modify the NSTN licenses by deleting the frequencies that should not have been granted. NSTN sought reconsideration and protested the proposed modification, arguing that the Commission's statement with respect to future proceedings regarding the T-Band did not justify reconsideration of the original decision not to modify NSTN's licenses, and that

<sup>&</sup>lt;sup>14</sup> See Letter dated Apr. 26, 2012 from Scot Stone, Deputy Chief, Wireless Telecommunications Bureau, Mobility Division to David J. Kaufman, at 2.

<sup>15</sup> See id

<sup>&</sup>lt;sup>16</sup> See Petition for Reconsideration at 2-6 (filed May 29, 2012). In support, MRA provided the same information regarding interference that it had submitted in response to the Division's February 6, 2012 letter. See id. at Declaration of Mark J. Abrams.

<sup>&</sup>lt;sup>17</sup> See Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions, *Notice of Proposed Rulemaking*, GN Docket No. 12-268, 27 FCC Rcd 12357 (2012).

<sup>&</sup>lt;sup>18</sup> See id. at 12365 ¶ 19. On February 11, 2013, the Bureaus released a *Public Notice* seeking comment on issues related to the Spectrum Act's technical, financial, administrative, legal, and policy implications for T-Band licensees. *See* Wireless Telecommunications Bureau and Public Safety and Homeland Security Bureau Seek Comment on Options for 470-512 MHz (T-Band) Spectrum, *Public Notice*, PS Docket No. 13-42, 28 FCC Rcd 1130 (WTB/PSHSB 2013) (*T-Band Public Notice*). That proceeding remains pending.

<sup>&</sup>lt;sup>19</sup> 47 C.F.R. § 316.

<sup>&</sup>lt;sup>20</sup> See Mobile Relay Associates and National Science and Technology Network, Inc., Order on Reconsideration and Order Proposing Modification, 27 FCC Red 12332, 12335 ¶ 8 (WTB MD 2012).

<sup>&</sup>lt;sup>21</sup> See id. at 12335 ¶ 9.

<sup>&</sup>lt;sup>22</sup> See id. at 12335 ¶ 10.

modification was not in the public interest because, *inter alia*, MRA had not demonstrated that it was incurring harmful interference.<sup>23</sup>

9. On March 25, 2013, the Division denied NSTN's petition and protest, and modified NSTN's licenses for Stations WPMM274 and WPMP967 as proposed. He Division concluded that the Commission's decision not to address the T-Band in a *Notice of Proposed Rulemaking* seeking comment on proposals to implement the Spectrum Act constituted a changed circumstance that justified reexamination of whether it was then appropriate to modify NSTN's licenses. In the consequent reexamination, the Division dismissed NSTN's argument that MRA's evidence of interference was insufficient, on the grounds that NSTN should have made this argument earlier in the proceeding. The Division further concluded that modification of the defectively coordinated licenses would serve the public interest because leaving them unmodified would continue to harm MRA's end-users. NSTN then filed the application for review now before us.

# III. DISCUSSION

- 10. We will grant an application for review only if the staff's decision (1) conflicts with statute, regulation, case precedent, or established Commission policy; (2) involves a question of law or policy that has not been previously resolved by the Commission; (3) involves precedent or policy that should be overturned or revised; (4) makes an erroneous finding as to an important or material question of fact; or (5) commits a prejudicial procedural error.<sup>28</sup> For the reasons set forth below, we deny the application for review.
- TSB-88 provides the appropriate interference standard, <sup>29</sup> and that the locations and frequencies at issue did not comply with TSB-88 and were not properly coordinated. Instead, NSTN first argues that modification proceedings should wait until there is a definitive decision on how to treat T-Band stations or, in the alternative, that MRA's modification request should be denied without prejudice to refiling it after completion of the rulemaking proceeding. <sup>30</sup> We disagree. The question of when and how to reallocate and initiate an auction of the T-Band spectrum pursuant to the requirements of the Spectrum Act still needs to be determined, and Congress gave the Commission until February 2021 to reallocate and initiate an auction of the T-Band. The Bureaus' *Public Notice* is only a first step, designed to "gather information to inform [them] in their recommendations to the Commission." The questions posed include an analysis of the nature and number of licensees operating in the T-Band, the alternative spectrum bands potentially available to them (including use of the FirstNet public safety broadband network once it becomes operational), the appropriate timetable for accomplishing the task, the costs of

<sup>&</sup>lt;sup>23</sup> Petition for Reconsideration of Order Granting Reconsideration of Petition of Mobile Relay Associates' Request for Modification at 2-7 (filed Nov. 9, 2012); Protest of Order to Initiate Modification Proceedings at 2-8 (filed Nov. 9, 2012)

<sup>&</sup>lt;sup>24</sup> See Modification Order, 28 FCC Rcd at 3226-27 ¶¶ 14-17.

<sup>&</sup>lt;sup>25</sup> See id. at 3225 ¶ 10.

<sup>&</sup>lt;sup>26</sup> See id. at 3225 n.26 (citing 47 C.F.R. § 1.106).

<sup>&</sup>lt;sup>27</sup> See id. at 3225 ¶ 12.

<sup>&</sup>lt;sup>28</sup> 47 C.F.R. § 1.115(b)(2).

<sup>&</sup>lt;sup>29</sup> See also National Science and Technology Network, Inc., Memorandum Opinion and Order, 25 FCC Rcd 549 (2010); National Science and Technology Network, Inc., Memorandum Opinion and Order, 25 FCC Rcd 11384 (2010); Amendment of Part 90 of the Commission's Rules, Fifth Report and Order, WP Docket No. 07-100, 28 FCC Rcd 5924, 5930 ¶ 14 (2013).

<sup>&</sup>lt;sup>30</sup> See AFR at 3.

<sup>&</sup>lt;sup>31</sup> T-Band Public Notice, 28 FCC Red at 1131.

relocation for T-Band licensees and the appropriate compensation regime, the treatment of non-public safety licensees, and the implementation of narrowbanding policies.<sup>32</sup> Given the lengthy period of time available and likely required for T-Band migration, and the continuing potential impact on MRA and its customers of NSTN operations in violation of the TSB-88 requirements during that extensive period of time, it became appropriate to entertain MRA's modification request rather than further delaying any relief until completion of a future rulemaking proceeding.

- NSTN also asserts that the Division erred in declining to address NSTN's argument that MRA's evidence of interference was insufficient on the grounds that the argument should have been raised earlier in the proceeding.<sup>33</sup> Based on our review of the record, we agree with NSTN that it did raise the argument earlier, and that the Division should have addressed it.<sup>34</sup> NSTN argues that MRA's response to the Division's inquiry did not sufficiently document the interference, and did not establish that NSTN was the source.<sup>35</sup> However, MRA argues that over twelve years ago "MRA and its subscribers began to experience intolerable harmful interference," and that it "has not been able to make optimal use or loading of [its] pre-existing spectrally-overlapping frequencies." Based on our review of MRA's interference showing, including the declaration described above, we conclude that the information submitted by MRA was sufficiently responsive to the Division's instructions and supported initiation of license modification proceedings. The Division's action was consistent with Commission precedent.<sup>37</sup>
- 13. NSTN also argues that license modification is not in the public interest in this case because it frustrates spectral efficiency in two respects. First, NSTN contends that modifying its narrowband licenses to protect MRA's wideband licenses conflicts with the Commission's PLMR narrowbanding policy.<sup>38</sup> In 2010, the Commission specifically rejected such an argument by NSTN. It concluded that "[n]othing in that [narrowbanding] proceeding suggests that the Commission intended to reduce 470-512 MHz band incumbents' adjacent-channel interference protection in order to encourage them to adopt narrowband technology."<sup>39</sup> As noted above, the Bureaus have waived the narrowbanding deadline for PLMR licensees in the 470-512 MHz band in light of the Spectrum Act. While the Bureaus did not, in doing so, suggest that the Commission was retreating from prior determinations about the efficiency benefits of narrowband operations, the Bureaus similarly suggested nothing to indicate that it would be appropriate to compensate for the effects of the waiver on narrowband operations by providing incumbent wideband licensees with less interference protection than narrowband licensees. On the

<sup>&</sup>lt;sup>32</sup> *Id.* at 1131-34.

<sup>&</sup>lt;sup>33</sup> See AFR at 4-6.

<sup>&</sup>lt;sup>34</sup> Specifically, in its opposition to MRA's petition for reconsideration of the Division's initial denial of MRA's modification request, NSTN argued that the information submitted by MRA was not responsive to the Division's directions to supplement the record and did not demonstrate that NSTN was causing interference. *See* Opposition of National Science and Technology Network to Petition for Reconsideration of Mobile Relay Associates at 2 (filed June 5, 2012).

<sup>35</sup> See AFR at 6.

<sup>&</sup>lt;sup>36</sup> Opposition at 6, 8.

<sup>&</sup>lt;sup>37</sup> See California Metro Mobile Communications, Inc., Memorandum Opinion and Order, 17 FCC Rcd 22974, 22977 ¶ 11 (2002) (California Metro Mobile), aff'd, 365 F.3d 38, 46 (D.C. Cir. 2004); accord, Samuel Moses PR, Second Order on Further Reconsideration, 24 FCC Rcd 8857, 8866 n.76 (WTB 2009) (absence of specific complaints would not provide grounds for permitting operations that do not comply with the required interference protection standards); National Science and Technology Network, Inc., Order of Modification, 18 FCC Rcd 11321, 11326 n.52 (WTB 2003), review denied, 23 FCC Rcd 3214 (2008).

<sup>&</sup>lt;sup>38</sup> See AFR at 6-7.

<sup>&</sup>lt;sup>39</sup> National Science and Technology Network, Inc., *Memorandum Opinion and Order*, 25 FCC Rcd 11384, 11388 ¶ 10 (2010).

contrary, the Bureaus decided to maintain the pre-deadline *status quo*, simply concluding that in the current circumstances "there is substantial uncertainty regarding whether application of the narrowbanding deadline in the T-Band would continue to serve its original purpose." Thus, the Bureaus clearly intended for incumbent wideband operations to continue unimpeded, for they specifically provided that such licensees would be able to replace or add equipment during the waiver period in order to maintain their operations. As noted above, that view is consistent with Commission policy.

14. Finally, NSTN also argues that modifying its licenses undermines spectral efficiency because it will result in fewer users on the same spectrum.<sup>42</sup> That argument ignores the underlying premise of interference standards, as well as the Commission's specific determination not to reduce T-Band incumbents' adjacent-channel interference protection notwithstanding their spectral inefficiency. Moreover, as the Division observed, while modification of the licenses may affect NSTN's end-users, it increases the utility of the spectrum for MRA's end-users.<sup>43</sup> As the Division noted, NSTN also overstates the effect of the modification on its operations by failing to consider its other facilities at these locations.<sup>44</sup> Under the circumstances presented, we conclude that the public interest in requiring compliance with the relevant interference protection criteria.<sup>45</sup> outweighs here a claim based solely on a party's largely abstract assertions that it will lose efficiency benefits it has derived from violating such criteria.<sup>46</sup>

### IV. CONCLUSION AND ORDERING CLAUSES

15. After consideration of the record in this proceeding, we deny NSTN's application for review. We conclude that the Division's decision to modify NSTN's licenses for Stations WPMM724 and WPMP967 was proper.

<sup>&</sup>lt;sup>40</sup> See T-Band Narrowbanding Waiver, 27 FCC Rcd at 4214 ¶ 5.

<sup>&</sup>lt;sup>41</sup> See id. at 4215-16 ¶ 8.

<sup>&</sup>lt;sup>42</sup> See AFR at 7-8.

<sup>&</sup>lt;sup>43</sup> See Modification Order, 28 FCC Rcd at 3225 ¶ 12; see also Opposition at 8.

<sup>&</sup>lt;sup>44</sup> See Modification Order, 28 FCC Rcd at 3225 n.27. We note that NSTN is authorized for other T-Band channels at each of the five locations from which frequencies were removed, as well as numerous other facilities in the vicinity (in all, thirteen T-Band locations in Los Angeles County). NSTN has therefore failed to demonstrate that there would be more than a minor disruption to its system of the kind upheld in *California Metro Mobile*.

<sup>&</sup>lt;sup>45</sup> Such compliance serves the public interest not only because it provides MRA with the measure of protection against both actual and potential interference to which it is entitled under applicable Commission regulation, but also because it serves to maintain the integrity of a system of interference management based on compliance with such interference protection criteria, and it ensures that reasonable licensee expectations regarding established prophylactic interference protections are not unduly disrupted so as to discourage investment and the resulting development of service to the public.

<sup>&</sup>lt;sup>46</sup> Cf. 2011 NSTN Order, 26 FCC Rcd at 2070 n.30 ("Moreover, NSTN's assertion that it should not suffer for its frequency coordinator's error does not explain why it would better serve the public interest for MRA to bear the consequences of NSTN's defective coordination.").

16. Accordingly, IT IS ORDERED that, pursuant to Sections 4(i) and 5(c) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 155(c), and Section 1.115 of the Commission's Rules, 47 C.F.R. § 1.115, the Application for Review filed by National Science and Technology Network on April 23, 2013 IS DENIED.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch Secretary